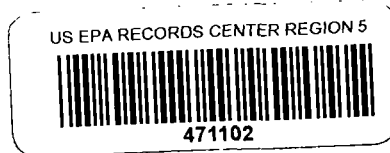


MEMORANDUM

DATE: 11/13/92

TO: Don Johnson, Cathie Cotton
FROM: Rick Trippel



RE: Notes regarding installation of remaining wells for
Project 04011.02 in Albion, Michigan

I have attached a map showing the approximate location for all proposed monitoring wells at the Albion site - for Phase I. I will stake locations MW-7, MW-8 and MW-9 on November 16 or 17.

Locations for the remaining 2 landfill borings and/or monitoring wells are not shown on the map since we are still evaluating the most beneficial location for these borings.

Wetland locations are very preliminary. I will select appropriate locations (that are accessible, hopefully). I am planning on having 2 additional techs install these wells while you (Don & Cathie) supervise the drillers.

Also attached is a table of proposed wells indicating the ID and anticipated depths for wells at each location. Sampling notes for each well are also provided in this table. Depths indicated for the screened intervals in wells at locations MW-1, MW-2, MW-3, MW-4, and MW-6 were accurately determined relative to the ground level at the shallow bedrock well at each of these locations. It would be best to survey ground level elevations for new wells relative to the ground level at the shallow bedrock well at these locations to ensure the desired interval is screened.

We have yet to determine the most appropriate depth for MW-4-SG. The appropriate number of wells and depths of wells at location MW-7 will be determined after the location has been staked. Depths indicated for wells at locations MW-8 and MW-9 are subject to change. I would like to review (& possibly adjust) the depths indicated for the screens in wells at locations MW-8 and MW-9 after additional wells are installed at MW-1 through MW-6.

I have listed the wells in the general order that I would like them installed. My basic goal is to install remaining wells at locations MW-1 through MW-6 first. I would like to install the deepest wells first and the shallowest last at

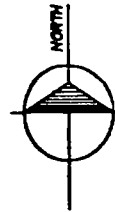
each cluster. Since the landfill borings will require the greatest sampling effort and safety monitoring, I would like to consider drilling these borings as soon after locations have been selected and the weather is anticipated to be dry as possible.

Every effort should be made to have one of the third men from one crew develop the wells as they are completed (at least 24 hours after they are completed). Perhaps development of some wells at each cluster could be completed during drilling of additional wells at that cluster. This would benefit the tech measuring pH, temperature, and specific conductivity as development is completed.

Mike does not want the Grundfos pump to be used at this site anymore. I have notified Bob Krukow at R&R Drilling that our pump will no longer be available for backup if their pump breaks down. I have told him to figure out an appropriate backup should one be necessary. For your information, after the most recent (only?) failure of their pump, Bob claims that it was repaired at their shop within 15 minutes after repairs began - the problem was silt buildup. Please keep me informed of any further problems with R&R follow through on mechanical failures, or anything else. I would like to be notified immediately if you feel they are not meeting our needs so that I can attempt to rectify any concerns as quickly as possible.

Please measure the water level in all wells at locations MW-1 through MW-6 once the wells are completed.

cc: Liz Uhl, Tom Timmermans



LEGEND



APPROXIMATE LOCATION
OF WETLAND AREA



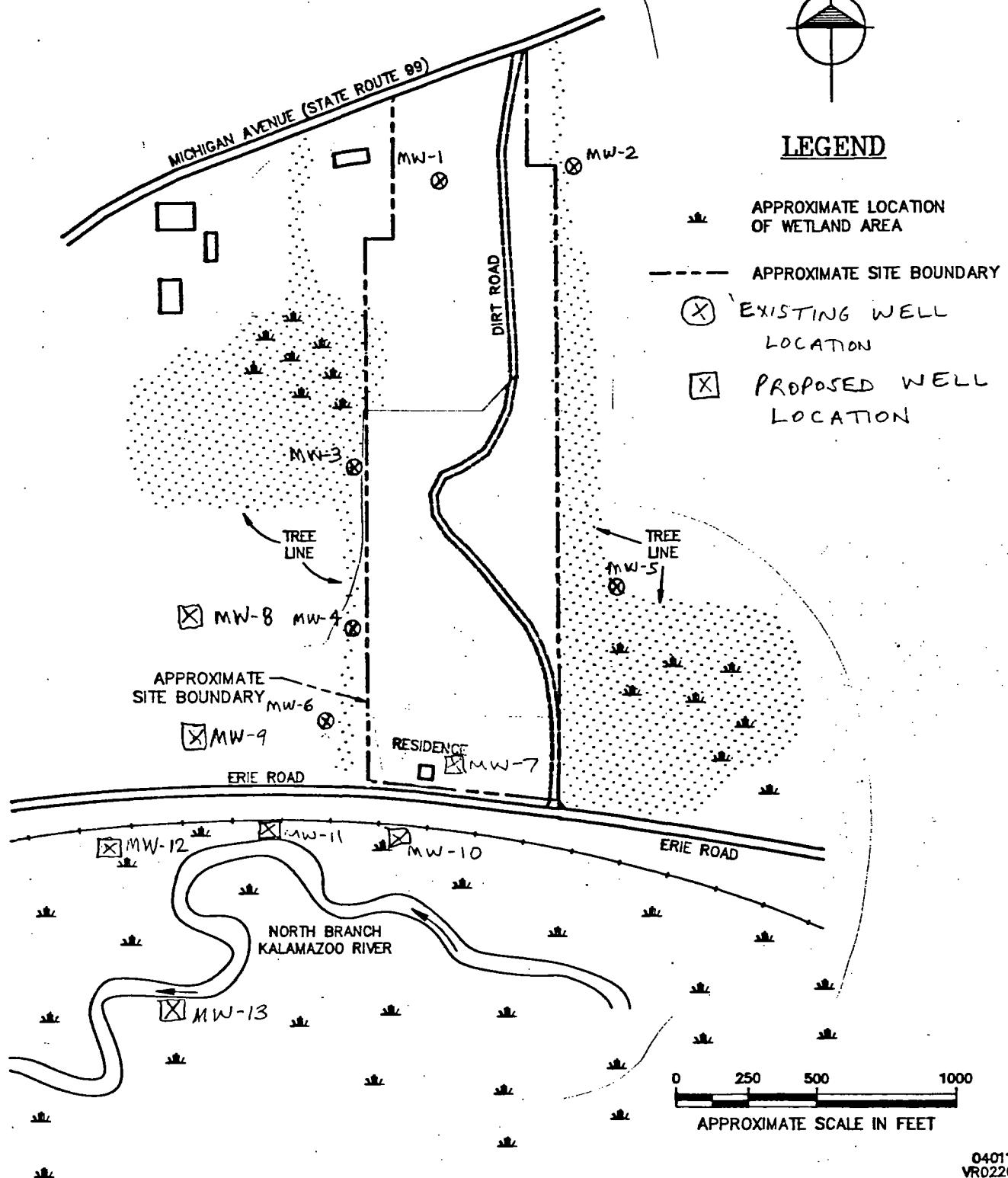
APPROXIMATE SITE BOUNDARY



EXISTING WELL
LOCATION



PROPOSED WELL
LOCATION



04011-X
VR022092

MONITORING WELL
LOCATION MAP
PHASE I
ALBION-SHERIDAN TOWNSHIP LANDFILL
ALBION, MICHIGAN

NOV. 12, 1992

04011

PROPOSED WELLS FOR ALBION-SHERIDAN TOWNSHIP LANDFILL - PHASE I

WELL LOCATION	WELL ID	SCREENED INTERVAL(ft)	NOTES
<u>11/17</u> MW-4	DB	95-100	No sampling required.
<u>11/18</u> MW-6	WB	46.5-51.5	Collect soil sample for CEC analysis from screened interval, if possible.
<u>11/18</u> MW-4	WB	56-61	No sampling required.
<u>11/19</u> MW-6	SG	23-28	Collect soil sample for CEC analysis from screened interval.
MW-4	SG		Depth to be determined at a later date, collect soil sample for CEC analysis from screened interval.
<u>11/17</u> MW-3	WB	54-59	No sampling required.
<u>11/18</u> MW-3	SG	37-42	Collect soil sample for CEC analysis from screened interval.
<u>11/20</u> MW-2	WB	48-53	Collect soil sample for CEC analysis from screened interval, if possible.
<u>11/20</u> MW-1	WB	54-59	No sampling required. Collect CEC @ screened depth of 15G 32-37'
MW-8	SB	59-64	* No sampling required.
MW-9	SB	39-44	* No sampling required.
MW-8	WB	47-52	* Split spoon sampling for ID & headspace at 2.5' intervals to water table, 5' intervals thereafter for ID only.
MW-9	WB	27-32	* Split spoon sampling for ID & headspace at 2.5' intervals to water table, 5' intervals thereafter for ID only.
MW-8	SG	31-36	* No sampling required.
MW-9	SG	12-17	* No sampling required.
MW-7	SB		Depth to be determined at a later date.
MW-7	WB		Depth to be determined at a later date. Split spoon sampling for ID & headspace at 2.5' intervals to water table, 5' foot intervals thereafter for ID only.
MW-7	SG	17-22	* Location to be determined at a later date.
LF-1			Drill to base of fill, install well if water is encountered, continuous sampling as planned.
LF-2			Drill to base of fill, install well if water is encountered, continuous sampling as planned.
MW-10	SG	3-6	* Continuous sampling for ID, headspace analysis on samples above the water table.
MW-11	SG	3-6	* Continuous sampling for ID, headspace analysis on samples above the water table.
MW-12	SG	3-6	* Continuous sampling for ID, headspace analysis on samples above the water table.
MW-13	SG	3-6	* Continuous sampling for ID, headspace analysis on samples above the water table.

* Well depths approximate, accurate depths to be determined during drilling.

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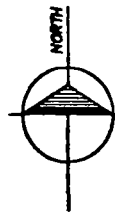
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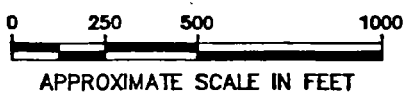
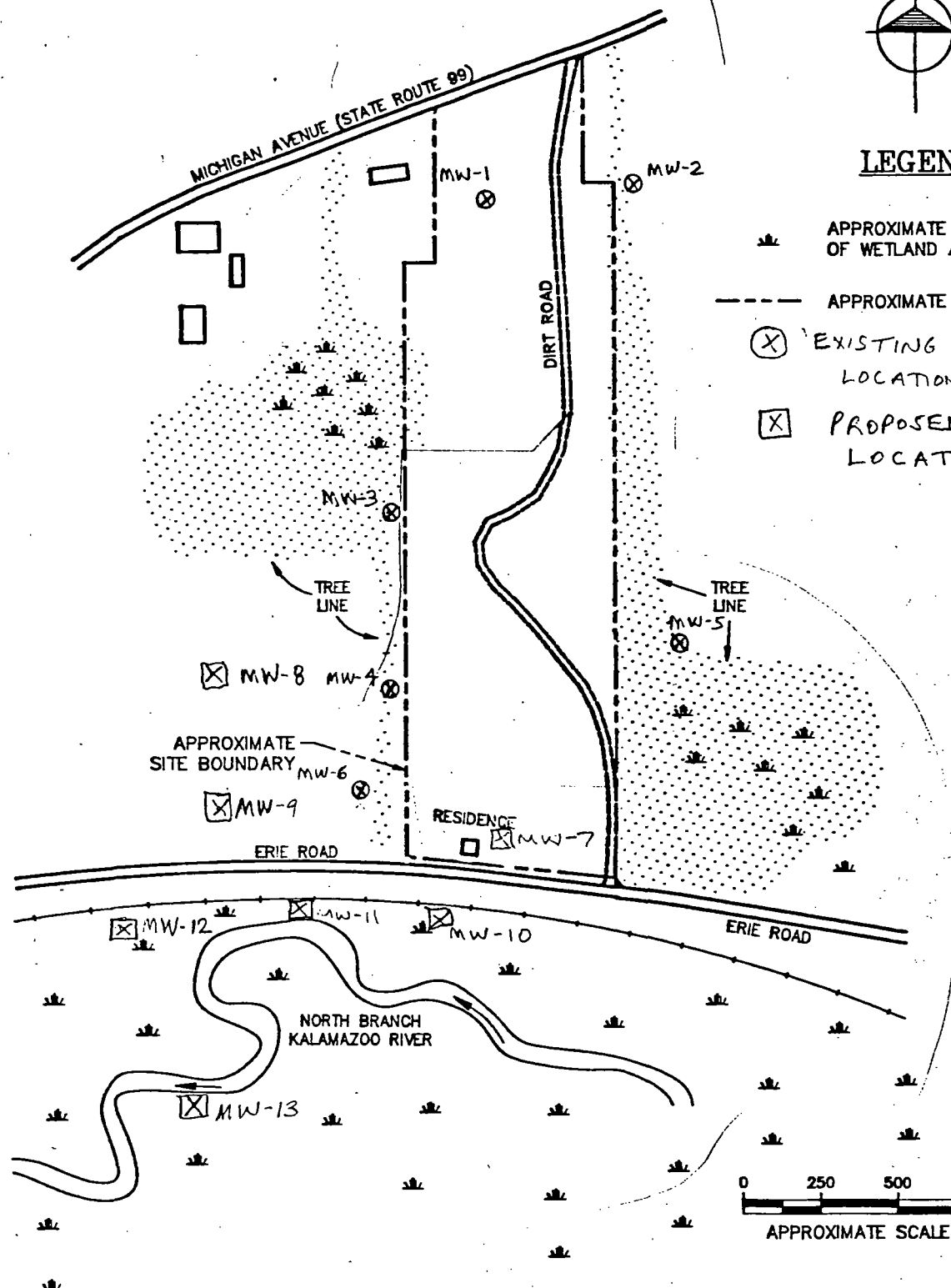
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cc: Liz Uhl, Tom Timmermans



LEGEND

-  APPROXIMATE LOCATION OF WETLAND AREA
-  APPROXIMATE SITE BOUNDARY
-  EXISTING WELL LOCATION
-  PROPOSED WELL LOCATION



04011-X
VR022092

MONITORING WELL
LOCATION MAP
PHASE I
ALBION-SHERIDAN TOWNSHIP LANDFILL
ALBION, MICHIGAN
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04011

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